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ABSTRACT

Congregate living may offer great potential for serving the frail elderly in public housing. To examine the short- and long-term outcomes of relocation to congregate housing, a 4-year longitudinal study compared the health, well-being, and satisfaction of 67 single individuals who moved into the Chicago Housing Authority's first congregate housing facility and 70 single residents who remained in service-minimal public housing. Resident assessments included a screening instrument, the Multi-Level Assessment Instrument, the Social Participation Inventory, the Service Utilization Survey, and outcome interviews. Environmental assessments were made using the Multiphasic Environmental Assessment Procedure and behavior observations. Staff records were also examined. The results indicated that in comparison with regular public housing residents, congregate residents had a lower mortality rate, lower personal adjustment scores, and lower satisfaction with housing quality and services received. A comparison of initial frail residents who stayed in regular housing with those who moved to congregate housing suggests that the negative effects of relocation may outweigh the benefits of enriched services for the more frail residents. (Policy guidelines and recommendations are listed; data tables and figures are included throughout the report.) (NRB)

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LONGITUDINAL RESEARCH ON CONGREGATE PUBLIC HOUSING

Executive Summary

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LONGITUDINAL RESEARCH ON CONGREGATE PUBLIC HOUSING

Final Project Report

April 15, 1985

Submitted to: The Retirement Research Foundation

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This project has been especially fortunate to have had an excellent staff, including Linda Gall, the research assistant, who kept the project going through its difficult periods, David Drehmer, who provided the conceptual support, and Barry Grau, the statistician. Three distinguished leaders in the field, M. Powell Lawton, Frances M. Carp, and Sonne Lemke served as national advisors and provided us with expert guidance and encouragement. Graduate students from many disciplines (Psychology, Social Work, Public Health, Nursing) also were an important part of the effort.

Finally, we would like to give tribute to Thomas O. Byerts, who conceived this project and dedicated his life to the promotion of humane and accessible housing for aged people. Until his death, he was writing books, making major presentations, and spending numerous hours advancing the state-of-the-art in housing issues. His dedication to the field of aging and to this project served as an inspiration to all of us who had the fortune to work with him and gain from his ideas and knowledge.

We are grateful for the opportunity to have been a part of CHA's efforts to expand services to aged populations.

We hope that this research and evaluation study will contribute to the development of innovative and effective residential alternatives for elderly people.

Tamar Heller. Ph.D.
April 15, 1985

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

Introduction

Between 10% and 15% of the people residing in the 512,164 units of public housing for the elderly nationally are projected to need supportive services. This number is expected to increase as older people live longer and "age in place". One attempt to meet the needs of the frail elderly has been the development of congregate housing. In-house services such as central dining, homemaking and housekeeping, health, recreation, transportation, and security characterize congregate or "service intensive" housing. At this time of heightened budget constraints, it is particularly important to develop and test alternatives expected to be beneficial in addition to cost effective, and which bridge the gap between independent housing and institutions.

The Chicago Housing Authority (CHA) was one of the first large housing authorities to seek congregate support necessary to administer a new prototype. This situation offered the opportunity to explore systematically the impact of congregate or "service-intensive" housing on the more dependent elderly residing in public housing. A major four-year longitudinal study was designed with that time span being judged as sufficient and necessary to eliminate relocation bias and collect annually detailed data on the benefits and tradeoffs accrued by a sample of residents who moved to and lived in CHA's first congregate housing facility. This sample was compared to a sample of residents who remained in regular "service-minimal" CHA housing for the elderly located throughout the city.

Unique features of this study were: 1) all subjects currently lived in public housing; and 2) the physical environment was similar to service-minimal housing. This report describes the outcomes over four years of a sample of 137 single individuals who applied to move into the facility from 50 regular public housing sites for the elderly throughout Chicago. More specifically, the health, well-being, and satisfaction of 67 single movers has been compared to that of 70 single stayers. To place the findings in perspective, the congregate environment and service packages have also been compared with five regular housing facilities.

The work was based on Lawton/Nahemow's Ecological Theory of Aging and Kahana's Congruance Theory. These held that "successful aging" is the dynamic resultant that occurs at any given point in time when there is an appropriate match between the capacities/needs of the older person and the demands/supports of the physical, social, and service environment. Research methods used were based on the work of Lawton, Carp, and Moos, and augmented by protocols developed by the research team.

Public housing authorities are facing increasing demands to provide additional services and develop more supportive milieus through new construction, rehabilitation of existing housing, or redirection of resources and staff in regular housing. Other options are costly placements in institutions, decline in inappropriate public/familial settings, stiff competition for the few available intermediate living alternatives, and/or

uncertainty of obtaining providers. Thus, congregate living appears to offer great potential for the more frail in public housing. Housing authorities need to come up with new options for addressing the needs of this group effectively and humanely in the face of bureaucratic deregulation, scarce resources, and gaps in knowledge. Some 5-10% of the elderly living in "service-minimal" public housing and many others on waiting lists are projected to need the benefits of congregate living. The "aging" of the growing population of older people in "service-minimal" public (and privately sponsored) housing for the elderly across the country mandates that new attention and resources be focused in this area if these people are to have the opportunity to "age in place". Determination of the most effective mix and use of limited resources as well as advocating increased levels of support where appropriate, has been and will continue to be critical to the quality of life for thousands of older people in this country.

The findings and recommendations are vital to the development of housing/service policy and programmatic alternatives for housing the aged of the future. This study was designed to contribute new knowledge to the formidable questions of who benefits more or declines less in congregate housing, in what ways, from what mix of services and milieu, and at what cost.

Project Objectives

The following objectives were discussed in the initial conceptualization of the project:

1. To conduct a systematic review of the methodological work of national authorities on elderly congregate housing.
2. To develop a prototype evaluation tool for use in research on the impact of group housing on the quality/quantity of life of the elderly and for use in program monitoring of service utilization and satisfaction.
3. To assess the short and long-term (up to four years) impact of moving into a congregate senior housing facility on elderly residents.
4. To develop and disseminate model guidelines which can be used by administrators, public policy planners, agency personnel, and advocates to promote services most suitable to the elderly population in senior housing settings.

Overview of Project Methodology

This study examined the short and long term outcomes of relocation to congregate housing on elderly residents who transferred from service-minimal housing over a four year period. As in Lawton and Nahemow's model of man-environment interaction of individual competence and environmental

press, outcomes were viewed in terms of individual "competence" and "affect". Competence referred to the upper limit capacity of the individual to function in the areas of biological health, sensation-perception, motor behavior, and cognition. Affect included the individual's psychological well-being, perceived quality of life, and satisfaction with the environment. Both competence and affect were measured annually by the Multi-Level Assessment Instrument (MAI) (Lawton, Moss, Fulcomer, and Kleban, 1982), which was based on Lawton and Nahemow's (1973) conceptual scheme and has been shown to be sensitive to environmental changes. In addition, two interview instruments developed by the team, the Social Participation Inventory (SPI) and the Service Utilization Survey (SUS), were administered annually to assess social participation and service need and utilization in greater depth. Other data sets were generated from systematic observation of behavior in public spaces, on-site staff record keeping, and monitoring of interim and ultimate outcomes/change of status of a sample of movers and stayers.

Although several studies of the impact of planned housing, service-enrichment, and relocation of the elderly have looked at various types of environmental variables, they have not been able to adequately characterize the environments of both the new and old settings. Also, they have tended to either describe the environmental features in a comprehensive, but qualitative fashion, or in a narrowly focused and quantitative one.

This study attempted to measure the numerous facets of the environment in a systematic and comprehensive manner. This was done with the Multiphasic Environmental Assessment Procedure (MEAP) (Moos and Lemke, 1979), which was developed to evaluate sheltered care settings for the elderly. It included four sections, each covering a major environmental facet; the Architectural Features Checklist (PAF), Policy and Program Information Form (POLIF), Resident and Staff Information Form (RESIF), and the Sheltered Care Environment Scale (SCES). In addition to the MEAP interviews, objective measures (Behavioral Mappings) of aggregate public social and activity behavior were included. The advantage of such a comprehensive and systematic environmental assessment was that it facilitated the study of the interrelationship of various environmental characteristics and related these features to the residents' behaviors and outcomes at the experimental and at five selected control facilities.

Hypotheses and Descriptive Issues

A. Hypotheses

1. Comparative Impact of Service Intensity - Residents who move into the "service-intensive" congregate housing program (movers) will exhibit either a greater increase in or lesser decline in "well-being" than their counterparts (stayers) who remain in the "service minimal" regular housing. The residents' "well-being" will refer to their physical, cognitive, social, and adaptive behavioral functioning and their life satisfaction.

2. Relocation Effect - Social participation of movers will decrease and morbidity will increase for the first six months following relocation,

but both will improve by the first year follow-up and level off thereafter.

3. Site-Boundedness - With more on-site programs and service resources available to the congregate population, greater proportions of the social behavior/service utilization of the movers will take place on-site rather than off-site, as compared to the stayers in regular housing.

4. Differential Effects on Well-Being - Among the movers, the initially more competent residents will exhibit less positive change in well-being, while the less competent residents will exhibit greater positive change in well-being in the new environment. By contrast, among the stayers, there will be less differential change over time in the well-being of those of high competence versus those of low competence.

B. Descriptive Issues

1. Compare the differences in the environment, policy, and social climate of the congregate and regular housing buildings.

2. Document the pattern of formal service need and usage (location, provider, and adequacy). Where possible, describe the reliance on the informal service network.

3. Analyze the screening/selection/replacement process and its impact on establishing/maintaining a mix of residents whose competencies and service needs match available services and resources.

Description of the Environment

The new facility offered the following congregate features: 1) a full-time staff site manager to coordinate services, supervise staff, and promote social, health, and recreational activities (all other buildings had a part-time site manager); 2) in-house services of one full-time homemaker and one full-time chore housekeeper (these positions were not available in the other buildings); 3) a voluntary one meal-a-day (five days-a-week) Administration on Aging nutrition program, although a full kitchen and dining room were available on site (a similar weekday noon meal program is available in approximately half of the more than 50 senior housing sites and is usually found in at least one of the buildings located on the many multi-building sites); 4) clinic space for periodic visits by outside health, mental health, and social service providers (rarely available in other facilities); and 5) one full-time and one part-time custodian, forming a much higher custodial ratio than in regular housing.

Table 1 provides a comparison of the physical and service features of the congregate and regular facility. Although the congregate facility had more formal services provided by on-site CHA staff than did regular housing, it did not provide the degree of service initially promised or expected by the residents. This included reductions in what was originally promised in the meal programs, the aide's time allotted to the building, the security services, and the transportation. Some residents also heard, possibly through rumors, that they would also have emergency cords in their apartments, and a physician in the clinic full-time.

While the 85 unit six story facility was smaller and had fewer floors than most other CHA buildings (the average size was over 160 units and the average height was 12 stories), the design and layout of the apartments and double-loaded hallways of the six-story mid-rise was similar to other CHA projects. The congregate facility was free standing, while many of the regular housing facilities were located on multi-building sites.

For the more intensive comparison of the experimental and control site environments, five of the 36 urban sites containing 52 buildings administered by CHA were selected at random. Ten buildings were located on these sites; one on one site, two each on three separate sites, and three on another site. The sixth site was the new service intensive facility.

Description of the Sample

Only current residents of the 52 CHA buildings located throughout the city were eligible for admission into the new facility. Initially, detailed applications from all the 197 residents interested in moving into the new facility were screened by a selection committee.

Experimentals (movers) and controls (stayers) were randomly selected from the stratified pool of single subjects. (Couples were not included in the analyses.) Invitations to move were extended to those selected and the stayers were notified that their names had been placed on a waiting list.

Due to a delay in opening the congregate facility, nearly a year elapsed before movers were able to be transferred. In the interim, several applicants had outcomes, changed their minds, or had forgotten they applied. By 1982, this cohort included 28 movers to the congregate facility and 113 stayers in the regular housing. For data analysis purposes, the comparison group of stayers was reduced to 44 by random selection. In order to bring residency up to capacity, applicants were then accepted without the screening committee. This second cohort included 43 movers and 44 stayers. The final sample of both cohorts was reduced to 137 (67 movers and 70 stayers), since 22 residents were either unavailable or refused either the screening or the initial MAI assessment.

Instruments

During the development of the model longitudinal research protocol, several research instruments and techniques were identified, reviewed, and developed. A mix of existing tools and supplementary instruments developed by the research team was used to comprehensively address the project's hypotheses and descriptive issues.

The selected instruments included the following:

Resident Assessments

- Screening Instrument
- Multi-Level Assessment Instrument (MAI)
- Social Participation Interview (SPI)
- Service Utilization Survey (SUS)
- Outcome Interviews

TABLE 1

COMPARISON OF PHYSICAL AND SERVICE FEATURES

PHYSICAL FEATURES

<u>Congregate Facility</u>	<u>Regular (53 buildings)</u>																
• Single, free standing building • Six stories high • Unit Mix: <table> <tr> <td>0 bedroom units</td><td>0</td></tr> <tr> <td>1 bedroom units</td><td>84 (83 + 1 clinic)</td></tr> <tr> <td>2 bedroom units</td><td>1</td></tr> <tr> <td>3 bedroom units</td><td>0</td></tr> </table> • Located in an attractive, improving residential neighborhood • Large dining facility space for Golden Diners program and complete but unused commercial kitchen	0 bedroom units	0	1 bedroom units	84 (83 + 1 clinic)	2 bedroom units	1	3 bedroom units	0	• Some are single, free standing buildings but many are located on sites with other senior housing projects • Buildings range from one story to 26 stories and average approximately 12 stories • Unit Mix: <table> <tr> <td>0 bedroom units</td><td>1,244</td></tr> <tr> <td>1 bedroom units</td><td>6,987</td></tr> <tr> <td>2 bedroom units</td><td>66</td></tr> <tr> <td>3 bedroom units</td><td>3</td></tr> </table> • Sites scattered throughout the city with differing levels of security and services • One half house Golden Diners meals programs	0 bedroom units	1,244	1 bedroom units	6,987	2 bedroom units	66	3 bedroom units	3
0 bedroom units	0																
1 bedroom units	84 (83 + 1 clinic)																
2 bedroom units	1																
3 bedroom units	0																
0 bedroom units	1,244																
1 bedroom units	6,987																
2 bedroom units	66																
3 bedroom units	3																

SERVICE FEATURES

<u>Congregate Facility (CF)</u>	<u>Regular Housing (RH)</u>
• Site Manager - full-time • Homemaker - full-time • Chore Housekeeper - full-time • A voluntary five days a week noon Golden Diners meal program • Clinic Space - in house • Custodian - full-time with part-time helper serving many fewer than the average units in RH	• Site Manager - part-time • Homemaker - none • Chore Housekeeper - none • A voluntary five days a week noon Golden Diners meal program located in approximately half of the buildings • Clinic Space - none • Custodian - full-time with part-time helper serving many more units than CF

Environmental Assessments

- Multiphasic Environmental Assessment Procedure (MEAP)
- Behavior Observations

Staff Records

- Larrabee Service

Results1. Well-being of congregate residents.

In comparison with regular housing residents congregate residents had:

- a lower rate of mortality over a three year span (16% versus 30%)
- lower personal adjustment scores

2. Satisfaction of congregate residents.

In comparison with regular housing residents congregate residents had:

- lower satisfaction with housing quality
- lower satisfaction with services received, (particularly in the areas of heavy housekeeping, reaching high or low places, and with laundry)
(See Figures 6-9)

For congregate residents there was a gap between initial expectations and actual services provided.

3. Social participation and support.

- Congregate and regular housing residents did not differ in degree of on-site and off-site social participation.
- However, they did differ in amount of social support received by friends and families, with the congregate residents reporting lower levels of support.

4. Site-boundedness

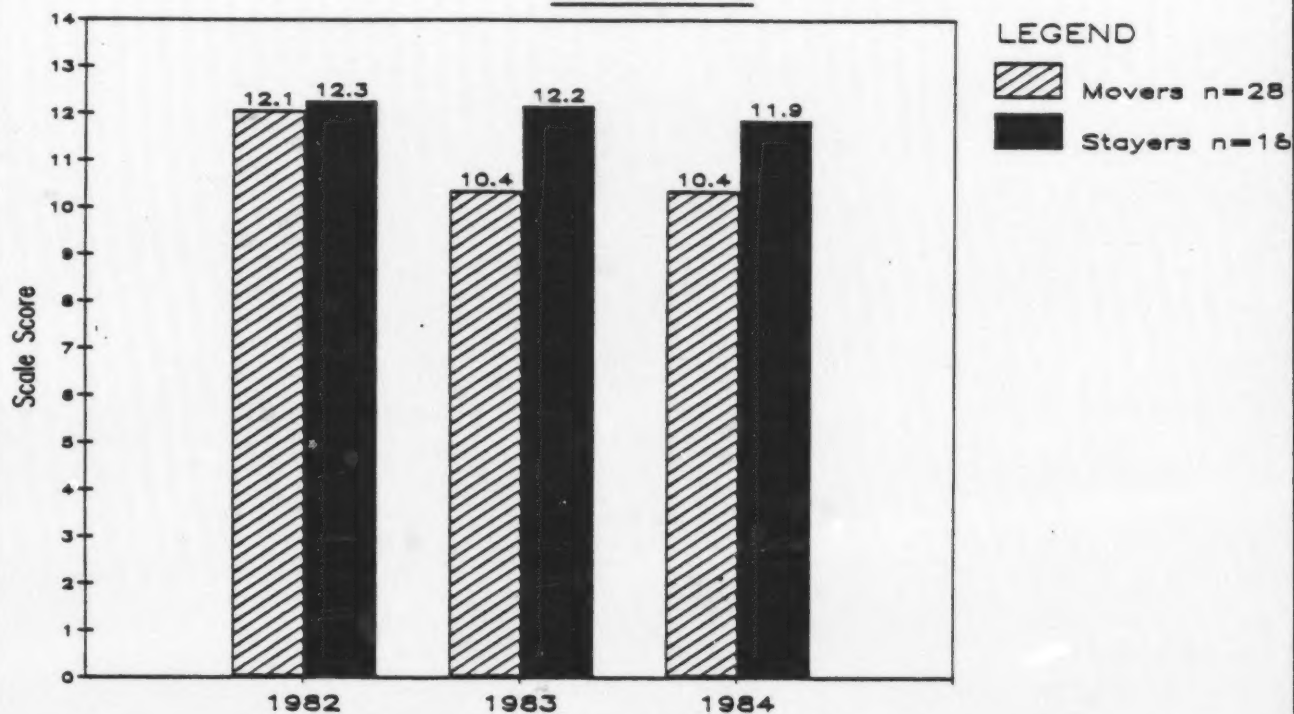
Unlike hypothesized, the congregate residents did not indicate any greater site-boundedness than did regular housing residents in social participation or service utilization.

5. Differential effects for initially high and low competence residents.

Among the initially frail residents, movers were more likely than stayers to have:

- negative outcomes (death, nursing home placements)

MAI SCALES OF ENVIRONMENTAL SATISFACTION
FOR MOVERS AND STAYERS BY YEAR (1982-1984)
HOUSING



NEIGHBORHOOD

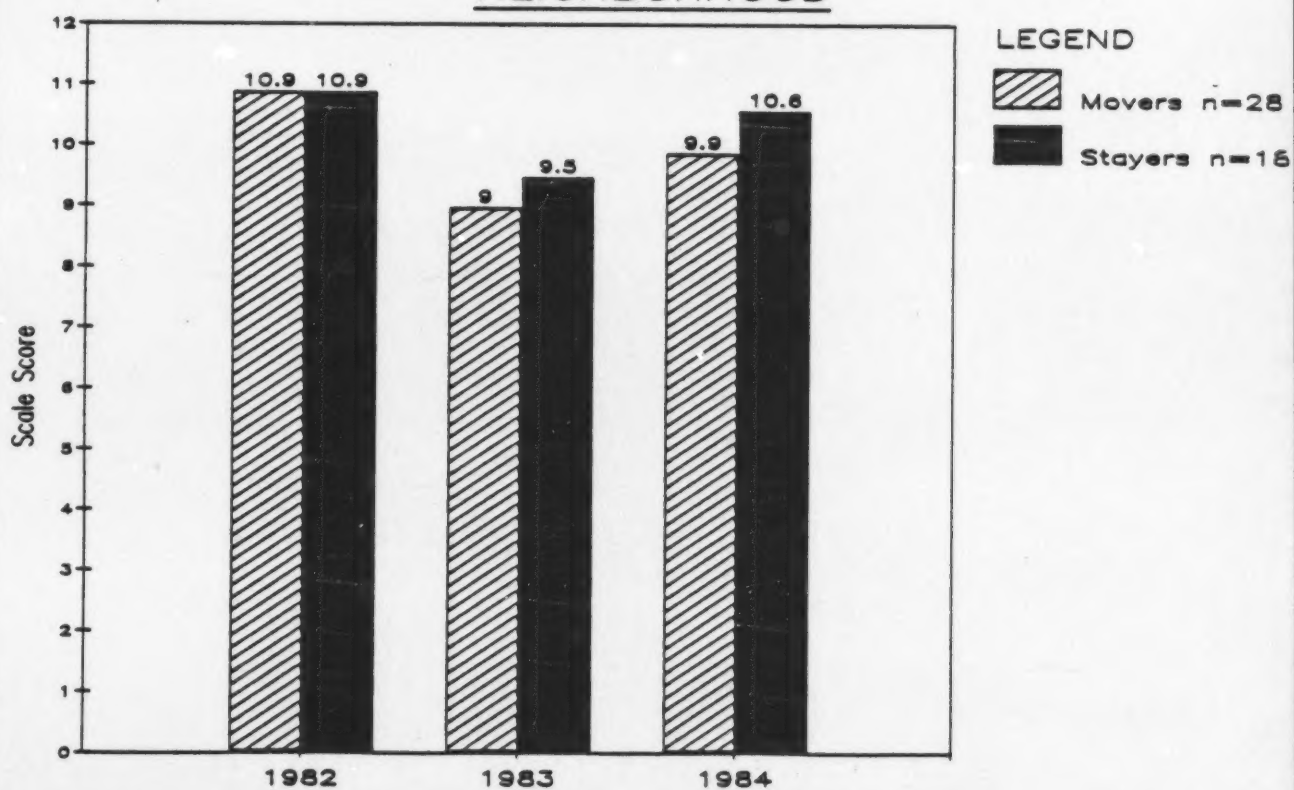


Figure 7

SERVICE UTILIZATION OF MOVERS & STAYERS (1982)

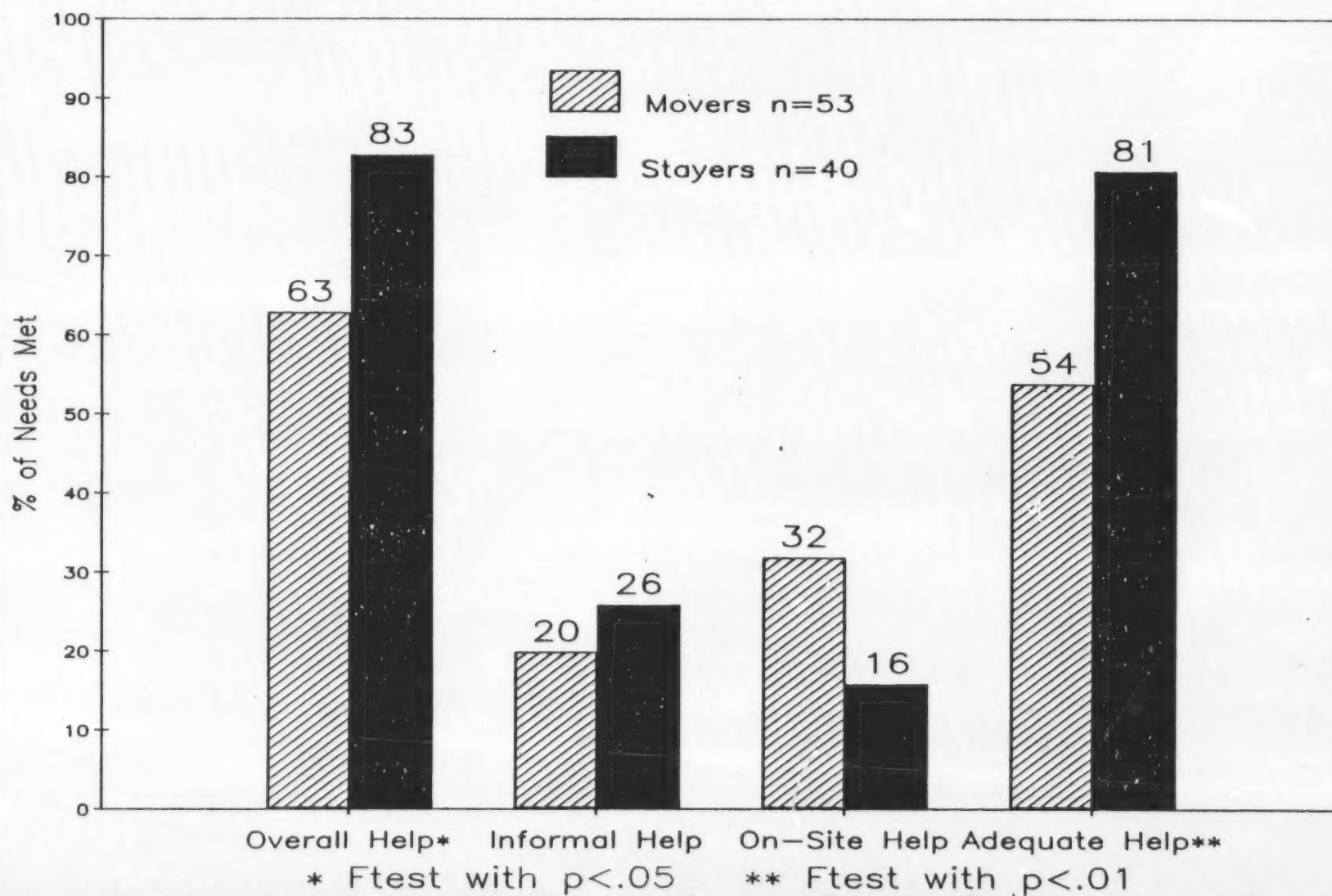


FIGURE 8

SERVICE UTILIZATION OF MOVERS & STAYERS IN ONE YEAR FOLLOW-UP (1983)

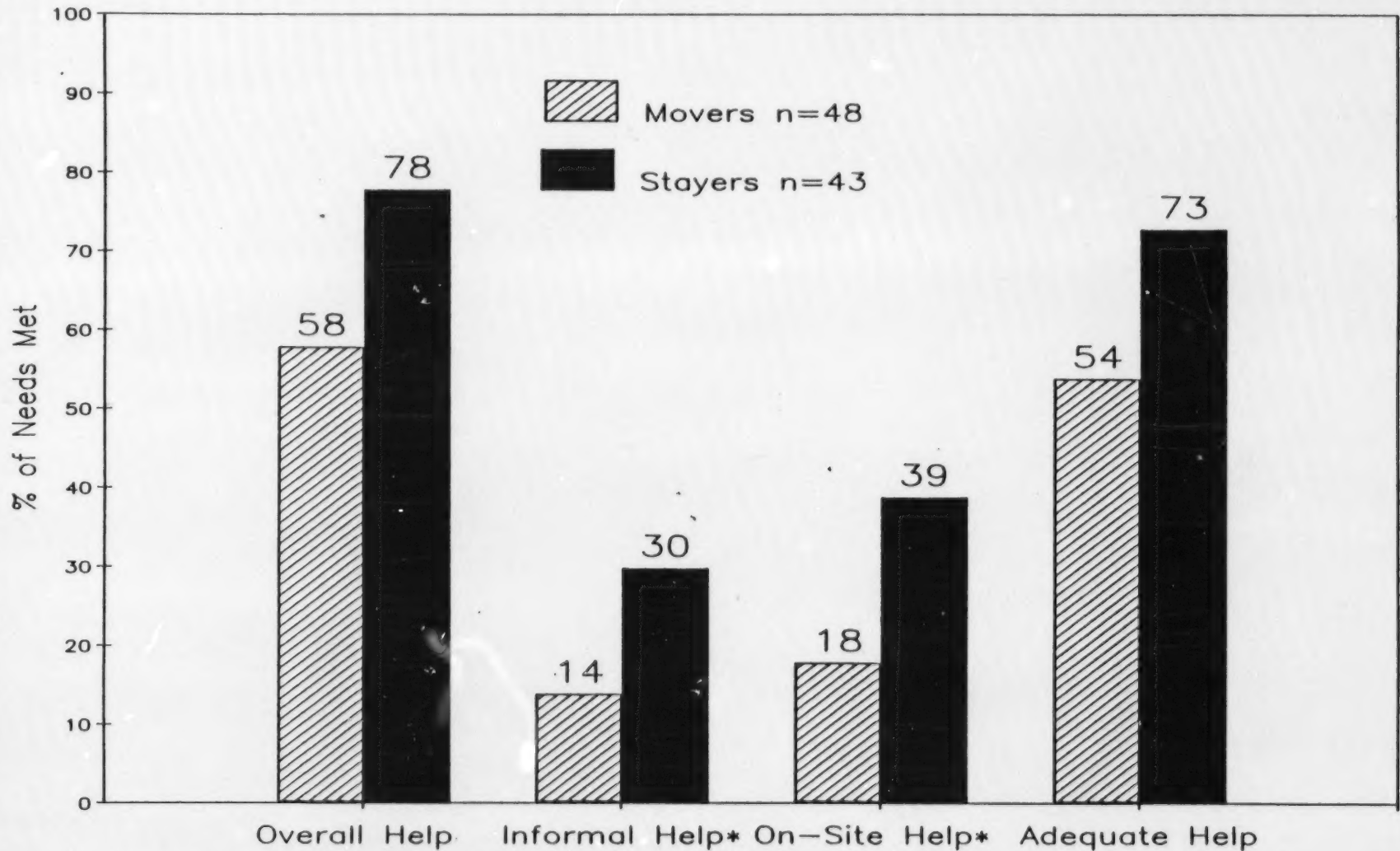
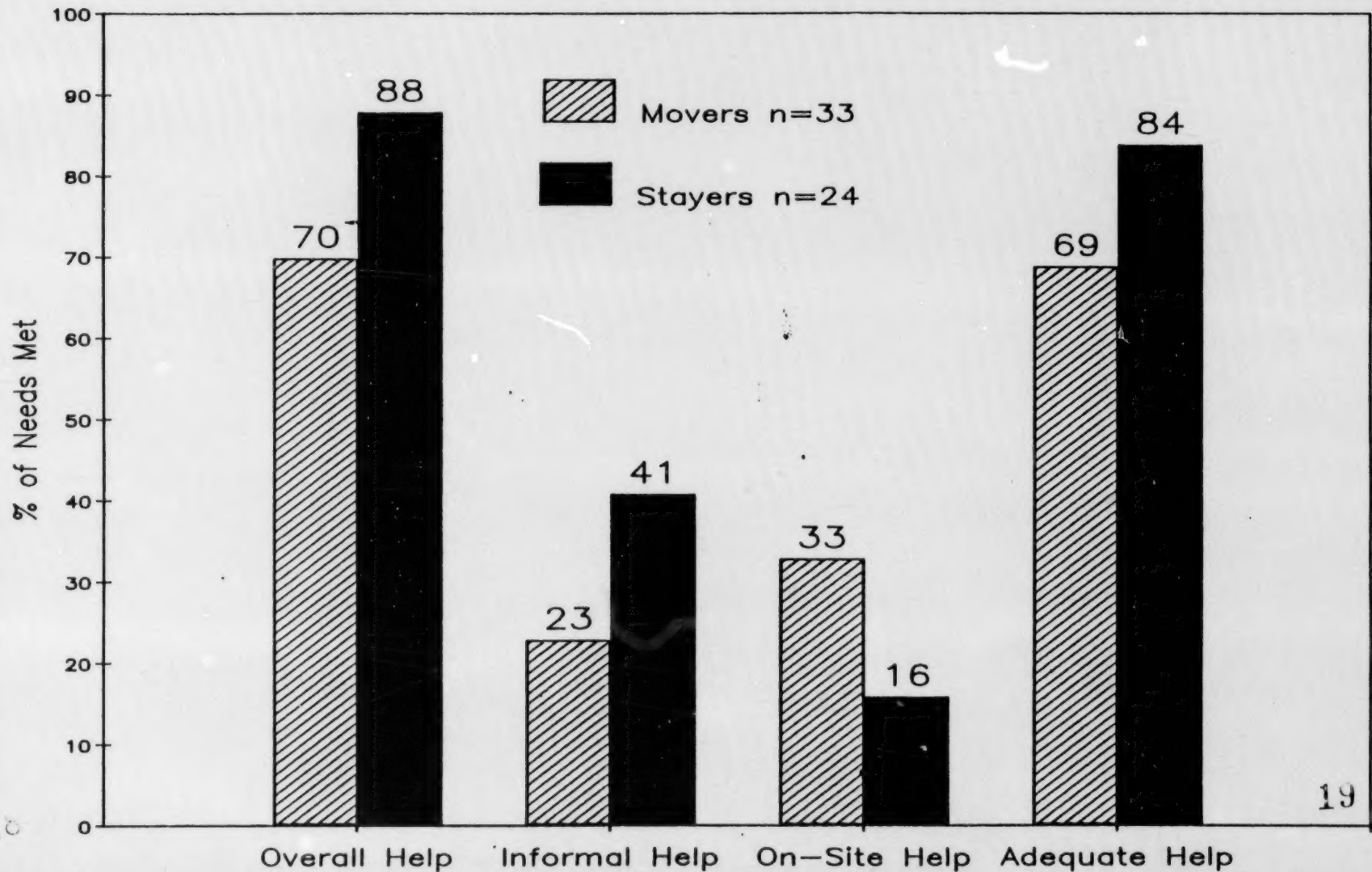


FIGURE 9

SERVICE UTILIZATION OF MOVERS & STAYERS IN TWO YEAR FOLLOW-UP (1984)



Note: There are no significant differences in 1984.

- lower health scores
- lower personal adjustment scores
- higher perceived service needs
- lower proportions of needs being met

In contrast, among the high competence residents, movers were less likely than stayers to have:

- negative outcomes
- lower health scores
- lower personal adjustment scores
- higher perceived service needs
- lower proportions of needs being met
(See Figures 4 and 5)

6. Relocation effect.

Negative relocation effects seemed to outweigh the benefits of enriched services for the more frail residents.

7. Predictions of outcomes.

The best predictors of negative outcomes (death, move to nursing home) over three years were:

- older age
- low MAI health scores

8. Predictions of service utilization.

The best predictors of service utilization three years later were:

- low MAI health scores
- low MAI activities of daily living scores
- high perceived service needs

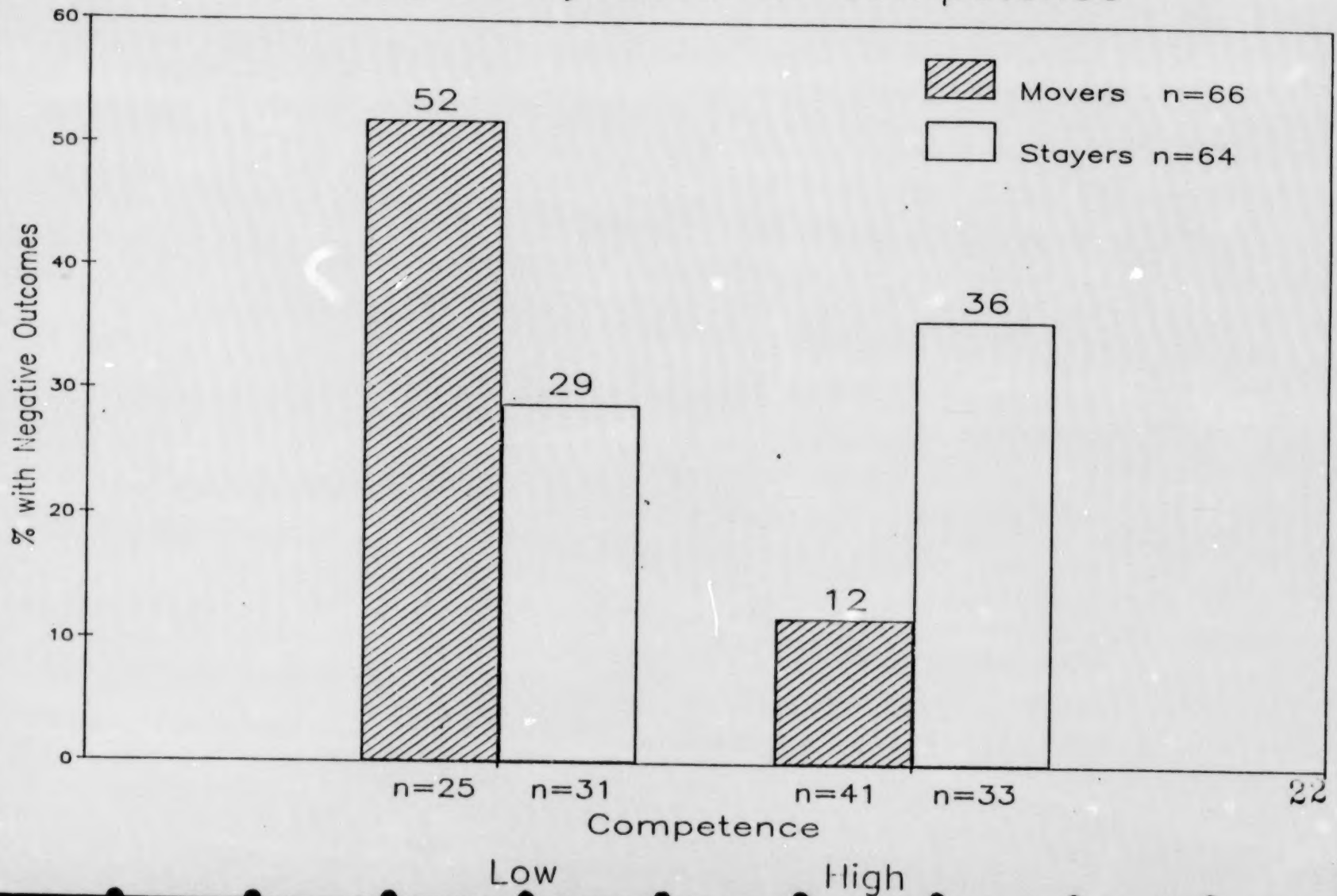
9. Major resident needs.

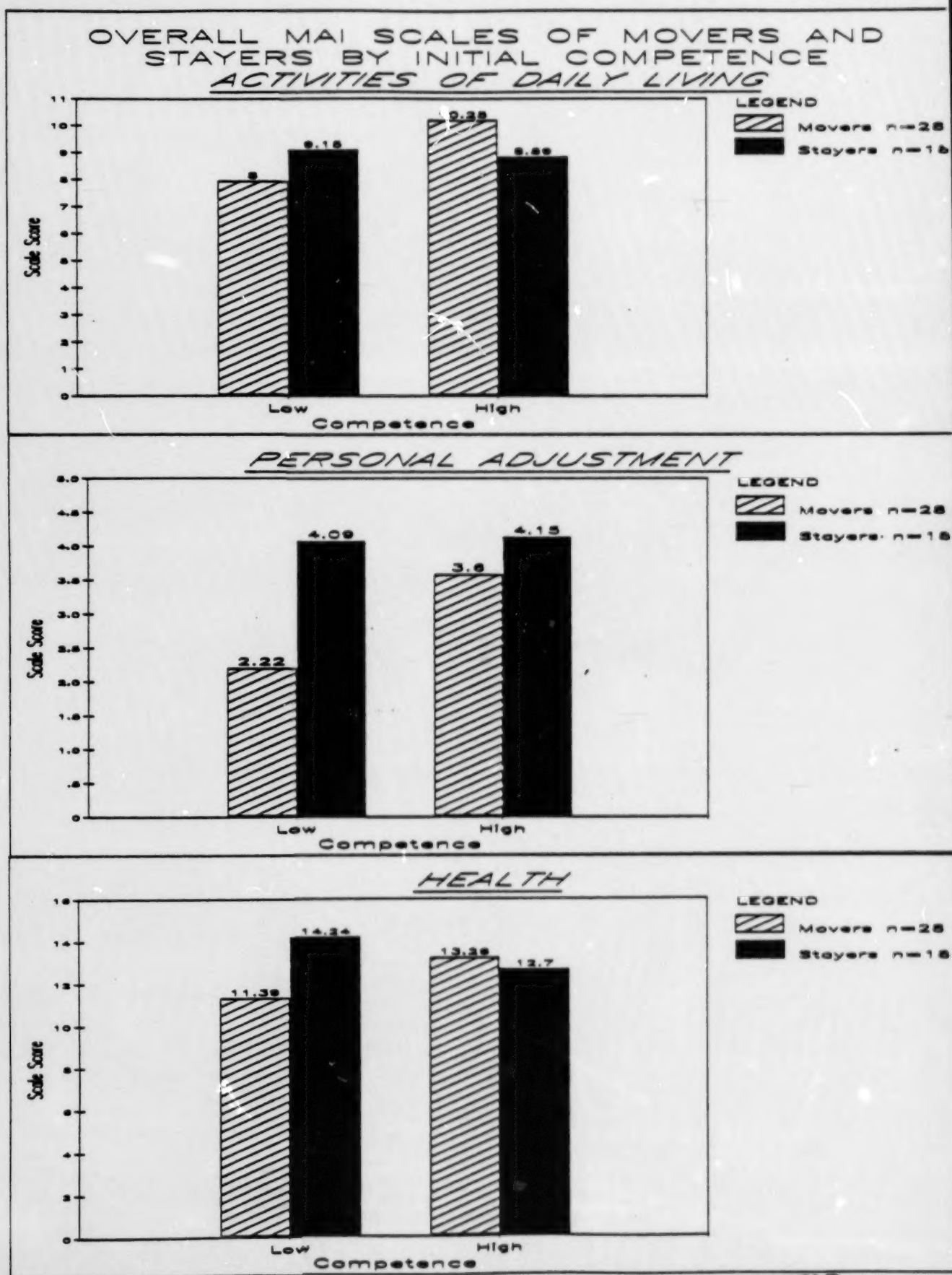
Over 50% of the sample expressed needs in the areas of:

- heavy housekeeping
- food shopping

FIGURE 4

Three Year Outcomes (1982-1984) For Movers And Stayers by Level of Competence





Over one-third reported needing help with:

- heavy laundry
- reaching high and low places

10. Unmet needs.

The needs most likely to be unmet were:

- reaching high and low places
- heavy housekeeping

11. Service providers.

Of the top ten needs expressed, only help with handling money was more likely to be provided by a family member or friend than by a formal caregiver.

12. Environmental effects on social/activity behaviors.

High social and activity participation in public areas were associated with:

- lower rise buildings
- higher number of front doors left ajar

Policy Guidelines and Recommendations

Marketing congregate services.

- Whenever possible, consider developing congregate programs within existing buildings, if space permits, rather than building new housing projects and having to relocate residents. This would reduce the adverse effects of relocation for frail residents.
- Among potential applicants, survey what their needs are and what services they would use. This would ensure greater resident participation in service programs and more accurate projections of service utilization.
- In order to prevent vacancies or waiting list attrition wait to begin the recruiting process shortly before the new facility is completed. With long delays, elderly applicants often forget or lose interest in moving.
- Avoid making promises of services that are not likely to be offered. This will only result in dissatisfaction by the new building's residents.
- Market the new facility through site visits and media events.

- The public housing authority must first establish policy guidelines regarding targeting of services based upon level of functional impairment. Input can be gained by assessing needs of residents in existing buildings either directly or via building managers. Budget constraints will influence targeting the degree of service intensity.
- Inform the public that the congregate facility provides enriched services, but is not a nursing home.

Determining appropriate resident mix.

- Screen residents carefully through existing surveys, such as by select MAI scales or by this project's screening instrument. In particular, measure the key variables of age, health, personal adjustment, and activities of daily living.
- Maintain a mix of frail and more competent residents so as to avoid over-burdening the congregate facility's services and to avoid becoming a nursing home.
- Residents requiring long-term nursing care and many hours of personal care services need to be moved to other settings.

Determining the service package.

- The most important services required by residents are:

- housekeeping/laundry
- food shopping
- assistance in reaching high and low places

This suggests the usefulness of increasing housekeeping/homemaker services and transportation options in addition to improving the architectural design of congregate housing to accommodate physical impairments (e.g., low cabinets).

- Other major needs and services include:

- getting around the neighborhood and to the doctor
- cooking meals
- handling money
- washing hair and tub bathing

- The service package should include hard and soft services which are viewed as supportive rather than as amenities and which provide a minimum level of satisfaction of basic needs for elderly residents experiencing some degree of functional decline.
- Discourage those who do not need services from receiving them so as not to foster dependency.
- Look to off-site providers to augment the on-site services.

- Early in the planning process the public housing authority needs to coordinate services with the community agencies that would be providing the services.

Encouraging family/friends involvement.

- There is a need to encourage family participation to promote pre-existing ties.
- Attempt to house residents in locations as close as possible to their previous neighborhoods so as to maintain friendship networks.
- Develop outreach programs that involve the community and neighbors in volunteer services at the congregate facility.

Fostering social/activity participation.

- Design congregate facilities which are conducive to public socializing. Features would include:
 - lower rise buildings
 - comfortable public seating areas
 - open door policies
 - active social programming
- Encourage residents to participate in activities by allowing them to choose and plan activities and by extending personal invitations.

Evaluating future congregate programs.

- Evaluate the impact of congregate facilities through longitudinal analyses using multiple measures of well-being and resident satisfaction.
- Include both the managers' and residents' perspectives as they may be quite different.

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